



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,923	12/08/2000	Eiji Nakamura	107443	9836

7590 11/05/2003
Oliff & Berridge PLC
P. O. Box 19928
Alexandria, VA 22320

EXAMINER
KING, BRADLEY T

ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,923

Applicant(s)

NAKAMURA ET AL.

Examiner

Bradley T King

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 and 26 is/are allowed.
- 6) ☒ Claim(s) 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maisch et al (US# 5952799) in view of Poertzgen et al (US# 5979999).

Maisch et al disclose a brake control system including: a controller 18, a pressure control unit A-B that operates in accordance with a control signal supplied from the controller, a plurality of signal lines, the plurality of signal lines are divided into a plurality of signal line groups K1 and K2, and the signal lines of a first one of the signal line groups are connected between the controller 1 and the fluid pressure control 2 unit by a first connector K1, and the signal lines of a second one of the signal groups are connected between the controller and the pressure control unit by a second connector K2, and the controller is directly connected to the first connector and the second connector such that the controller outputs the signal lines independently from each other, wherein the first and second connectors exist in isolation from each other such that even if one connector falls into an abnormally connected condition, the other of the first and second connectors does not fall into an abnormally connected condition. Note the pressure control unit A and B are separate modules connected via separate and

Art Unit: 3683

independent buses (column 2, lines 41-43) to the controller 1. Therefore, each inherently has a connector of some sort. Since each bus is independent, failure of one of the buses does not affect the other. Note column 1, lines 42-46. Maisch et al further disclose the suitability of the control system in a electrically controlled hydraulic brake system (column 14, lines 4-7). Maisch et al lack the explicit disclosure of pressure control valves, however it is well known in the art to use pressure control valves in electrically controlled braking systems. Poertzgen et al teach a brake fluid pressure control device including a fluid pressure control unit with a plurality of control valves capable of controlling fluid pressures in a plurality of wheel brakes to inhibit rotation of a plurality of wheels. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the brake control system of in the system of Maisch et al with brake systems such as taught by Poertzgen et al to provide electrically controlled hydraulic braking with increased reliability and safety.

Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maisch et al (US# 5952799) in view of WO 98/28174.

Maisch et al disclose a brake control system including: a controller 18, a pressure control unit A-B that operates in accordance with a control signal supplied from the controller, a plurality of signal lines, the plurality of signal lines are divided into a plurality of signal line groups K1 and K2, and the signal lines of a first one of the signal line groups are connected between the controller 1 and the fluid pressure control 2 unit by a first connector, and the signal lines of a second one of the signal groups are connected

Art Unit: 3683

between the controller and the pressure control unit by a second connector, and the controller is directly connected to the first connector and the second connector such that the controller outputs the signal lines independently from each other, wherein the first and second connectors exist in isolation from each other such that even if one connector falls into an abnormally connected condition, the other of the first and second connectors does not fall into an abnormally connected condition. Note the pressure control unit A and B are separate modules connected via separate and independent buses (column 2, lines 41-43) to the controller 1. Therefore, each inherently has a connector of some sort. Since each bus is independent, failure of one of the buses does not affect the other. Note column 1, lines 42-46. Maisch et al further disclose the suitability of the control system in a electrically controlled hydraulic brake system (column 14, lines 4-7). Maisch et al lack the explicit disclosure of pressure control valves, however it is well known in the art to use pressure control valves in electrically controlled braking systems. WO 98/28174 teach a brake fluid pressure control device including a fluid pressure control unit with a plurality of control valves capable of controlling fluid pressures in a plurality of wheel brakes to inhibit rotation of a plurality of wheels. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the brake control system of in the system of Maisch et al with brake systems such as taught by WO 98/28174 to provide electrically controlled hydraulic braking with increased reliability and safety.

Response to Arguments

Applicant's arguments filed 8/6/03 have been fully considered but they are not persuasive. Applicant's arguments include features not recited in new claims 27-29.

Allowable Subject Matter

Claims 1-11 and 26 are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

BTK



JACK LAVINDER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600